

Exhibit 141

Deposition of Hal J. Singer, Ph.D.
(January 23, 2018) (excerpted)

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEVADA

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CUNG LE, NATHAN QUARRY, JON: CIVIL ACTION
FITCH, BRANDON VERA, LUIS :
JAVIER VAZQUEZ, and KYLE :
KLINGSBURY on behalf of :
themselves an others :
Similarly situated, :
Plaintiffs : CASE NO.
vs. : 2:15-cv-01045-RFB
: (PAL)
:
ZUFFA, LLC d/b/a ULTIMATE :
FIGHTING CHAMPIONSHIP and :
UFC, :
Defendants :
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- - -

Tuesday, January 23, 2018

DAY 2

- - -

Continuation of videotaped
deposition of HAL J. SINGER, Ph.D., taken
pursuant to notice, was held at the
offices of BERGER & MONTAGUE, P.C., 1622
Locust Street, Philadelphia, PA 19103,
commencing at 10:19 a.m., on the above
date, before Lori A. Zabielski, a
Registered Professional Reporter and
Notary Public in and for the Commonwealth
of Pennsylvania.

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<p>1 tracked market definition?</p> <p>2 A. It's conceivable that I did.</p> <p>3 I don't know how frequently this happens</p> <p>4 where there is a fighter associated with</p> <p>5 a promoter, which is covered by</p> <p>6 FightMetrics. That seemed -- that would</p> <p>7 seem to sweep up all of the associated</p> <p>8 fighters, but I allowed the database to</p> <p>9 inform that measure of the relevant input</p> <p>10 market.</p> <p>11 Q. All right. And if you --</p> <p>12 why let the database define the fighters</p> <p>13 in the tracked market as opposed to</p> <p>14 define the tracked market by all the</p> <p>15 fighters who work for the buyers in the</p> <p>16 market?</p> <p>17 A. Again, I am not letting the</p> <p>18 database define it. I am defining the</p> <p>19 market. The database is one way to</p> <p>20 measure the scope of the market after I</p> <p>21 have defined it. I have defined it as</p> <p>22 MMA, professional MMA fighters, and then</p> <p>23 I want to go out and get a list of who</p> <p>24 those fighters are. And, of course, this</p>	<p>1 that rather than look at all the fighters</p> <p>2 who worked for buyers -- who fought for</p> <p>3 buyers in the market?</p> <p>4 A. Remember, there were a few</p> <p>5 additions I believe that I made to the --</p> <p>6 to the tracked, and then there were a few</p> <p>7 additions that I made to the -- to the</p> <p>8 ranked.</p> <p>9 I am not certain that there</p> <p>10 are fighters who were omitted in the way</p> <p>11 that you describe. But I think that</p> <p>12 there is a product in the market, people</p> <p>13 use it to study this industry, and I felt</p> <p>14 that that was a good place to start to</p> <p>15 define the participants in the market.</p> <p>16 Q. Okay. And did you follow</p> <p>17 the same approach with the ranked market?</p> <p>18 I asked you why did you look</p> <p>19 to the list of fighters in the ranked</p> <p>20 market as opposed to all the fighters who</p> <p>21 fought for buyers or promoters in that</p> <p>22 market. Your answer would be you wanted</p> <p>23 to start with a list that was in the</p> <p>24 marketplace?</p>
<p>1 is ultimately leading to how big is Zuffa</p> <p>2 in that -- in that market. And I think I</p> <p>3 identified two industry databases,</p> <p>4 FightMetrics and Fight Matrix, and I used</p> <p>5 both.</p> <p>6 Q. All right. For the tracked</p> <p>7 market, why did you use the FightMetric</p> <p>8 list of fighters to identify the fighters</p> <p>9 in that market as opposed to looking to</p> <p>10 all the fighters who were -- who fought</p> <p>11 for buyers in the market?</p> <p>12 A. I am not sure there is a</p> <p>13 difference still, as we sit here. But I</p> <p>14 wanted to allow -- there is a product in</p> <p>15 the market that promoters are buying or</p> <p>16 people who are tracking the MMA industry</p> <p>17 are buying, and that's the FightMetric</p> <p>18 database. I wanted to begin with that as</p> <p>19 the way to populate the participants from</p> <p>20 the fighters' perspective in my relevant</p> <p>21 input market.</p> <p>22 Q. Why begin -- I understand</p> <p>23 you wanted to begin with that. Why did</p> <p>24 you begin with that and I think end with</p>	<p>1 Page 540</p> <p>1 A. I thought that with -- with</p> <p>2 ranked, we wanted to be as broad as we</p> <p>3 possibly could and capture all the</p> <p>4 relevant participants. I think that if</p> <p>5 you -- if you go beyond who has a rank,</p> <p>6 you are going to tend to overstate the</p> <p>7 boundaries of the market. So I thought</p> <p>8 that was -- that served as a useful outer</p> <p>9 bound of how big the market could</p> <p>10 conceivably be.</p> <p>11 Q. The -- are you familiar with</p> <p>12 the term "price discrimination market" in</p> <p>13 the merger guideline?</p> <p>14 A. Yes.</p> <p>15 Q. Okay. Did you -- are you</p> <p>16 defining any price discrimination markets</p> <p>17 in this case?</p> <p>18 A. No.</p> <p>19 Q. If we look at paragraph 125</p> <p>20 of your report, your rebuttal, your reply</p> <p>21 report -- well, actually, I have this</p> <p>22 along, so I am going to skip that.</p> <p>23 Now, we have been discussing</p> <p>24 your input market, input markets.</p>

1 A. Yes.

2 Q. Now, your output markets are
3 the live MMA events in which the
4 participating fighters are either in the
5 relevant input market or the relevant
6 input submarket?

7 A. Yes.

8 Q. Okay. And the consumers of
9 the output market include viewers, cable
10 networks, broadcast networks and
11 sponsors; is that fair?

12 A. Well, certainly, viewers and
13 consumers.

14 Can I hear -- can I hear --

15 Q. Viewers, cable networks,
16 broadcast networks, sponsors.

17 A. I feel more comfortable
18 saying that viewers are the -- are the
19 primary consumers in the output market,
20 not the -- not the cable distributors.
21 That's just an intermediary between the
22 viewer and the -- and the producer of the
23 event.

24 Q. So I am not -- I wasn't

1 THE WITNESS: And let's just
2 focus on cable networks. Are
3 you -- I took your first question
4 to mean cable distributors. Are
5 you -- are you intentionally
6 making a distinction between cable
7 networks and cable distributors
8 now?

9 BY MR. ISAACSON:

10 Q. No. I am not even sure what
11 you mean by a cable distributor.

12 A. Oh, a cable distributor
13 would be like Comcast, and a cable
14 network would be like a station or a
15 network that appears on the cable system.

16 Q. I mean -- well, let's --
17 let's do both.

18 A. Okay.

19 Q. So -- so Comcast is under
20 your definition a cable station?

21 A. No. Comcast is a
22 distributor.

23 Q. A distributor. Okay.

24 A. Comcast happens to be

1 trying to assess anybody as primary or
2 secondary.

3 Rather, consumers -- do the
4 consumers in your output market include
5 viewers, cable networks, broadcast
6 networks and sponsors?

7 MR. CRAMER: Asked and
8 answered.

9 THE WITNESS: I don't recall
10 looking at substitution by
11 sponsors or substitution by cable
12 distributors. I think that the
13 right lens is that of the
14 consumer's perspective, ultimately
15 the viewer.

16 BY MR. ISAACSON:

17 Q. All right. Well, let me use
18 a -- maybe it's my word choice.

19 Are the customers in your
20 relevant output market viewers, cable
21 networks, broadcast networks and
22 sponsors?

23 MR. CRAMER: Objection to
24 form.

1 vertically integrated into certain
2 networks as well. But...

3 Q. All right. Okay. So are
4 the customers in your relevant output
5 market viewers, cable stations, cable
6 networks, broadcast networks and
7 sponsors?

8 MR. CRAMER: Form.

9 THE WITNESS: I think that
10 I -- the most natural customer to
11 think of in the output market,
12 which is the consumption of the
13 event, is the viewer. I think
14 that we could -- we could talk
15 about the way that sponsors -- the
16 role that sponsors play in this
17 market and the role that cable
18 networks play, but I -- they are
19 not -- they are not symmetrically
20 aligned with the viewers. And I
21 think that if -- I am trying to
22 recall the methods that I used to
23 define the contours, and I think
24 it was largely from the

1 perspective of viewers.
 2 BY MR. ISAACSON:
 3 Q. So for your relevant output
 4 market, are sponsors customers in that
 5 market?
 6 MR. CRAMER: Asked and
 7 answered.
 8 THE WITNESS: I just don't
 9 like using -- I don't like using
 10 the word "customer."
 11 BY MR. ISAACSON:
 12 Q. Okay. Are -- in your output
 13 market, are sponsors buyers in that
 14 market?
 15 MR. CRAMER: Asked and
 16 answered.
 17 THE WITNESS: Sponsors are
 18 buying advertising slots that are
 19 associated with the event itself,
 20 but I think the consumption of the
 21 event is most properly understood
 22 from the lens of the viewer, the
 23 consumer.
 24

1 I think the action, the
 2 television action at least, is occurring
 3 on the pay-per-view side, not on the
 4 non-pay-per-view viewing side.
 5 Q. As you define your relevant
 6 output market, are broadcast networks
 7 customers or buyers?
 8 A. I think the broadcast
 9 networks are buying the rights to
 10 distribute the events to the ultimate
 11 consumer, which is the viewer. So I
 12 still like to think about the consumer or
 13 the buyer in the output market, the
 14 event, the production of the event as the
 15 consumer, the viewer, ultimately.
 16 Q. And so I just need to go
 17 over this again because I understand you
 18 think the consumer -- you think about the
 19 consumer as the -- I guess as the -- as
 20 the buyer ultimately, but I am trying to
 21 figure out who you are excluding. I
 22 understand you have got the consumers in
 23 there.
 24 Are broadcast networks

1 BY MR. ISAACSON:
 2 Q. So does that mean sponsors
 3 are not buyers in your relevant output
 4 market?
 5 MR. CRAMER: Asked and
 6 answered.
 7 THE WITNESS: They buy
 8 advertising slots that are sold
 9 alongside the event itself, but I
 10 am -- I am considering the event
 11 as the -- as what's being
 12 produced.
 13 BY MR. ISAACSON:
 14 Q. Okay. In your relevant
 15 output market, are broadcast networks --
 16 I guess you don't like using the term
 17 "customers" for broadcast networks; is
 18 that --
 19 A. They are certainly not
 20 the -- not the ultimate customer. They
 21 are an intermediary that gets them
 22 between the ultimate customer and the
 23 producer. And only for a small sliver of
 24 events.

1 customers or buyers in your -- in the
 2 relevant output market you have defined?
 3 MR. CRAMER: Asked and
 4 answered.
 5 THE WITNESS: I think they
 6 are an intermediate -- an
 7 intermediary that stands between
 8 the customers and the producers of
 9 the events, and only for a small
 10 sliver of what I consider the
 11 valuable television that's being
 12 produced here.
 13 BY MR. ISAACSON:
 14 Q. So does that mean they are
 15 or are not customers or buyers in your
 16 relevant output market?
 17 A. I think -- sorry.
 18 MR. CRAMER: I was going to
 19 say, same objection.
 20 Go ahead. You may answer.
 21 THE WITNESS: I would -- I
 22 would say it depends on how you
 23 want to -- what question are you
 24 trying to answer?

1 BY MR. ISAACSON:

2 Q. I am talking about the
3 questions you are answering that you are
4 defining in your market. I am talking
5 about your relevant output market.

6 A. Sure.

7 Q. Are the buyer -- are the
8 broadcast networks buyers or customers in
9 that market?

10 MR. CRAMER: Same objection.

11 THE WITNESS: I think
12 that -- I would have to go back to
13 my initial report, but if I am
14 remembering correctly, I was
15 looking at where viewers would
16 go in response to a SSNIP in the
17 output market, not where cable
18 distributors would go, not where
19 cable networks would go. I was
20 looking at where viewers would go.
21 That's my memory, sitting here
22 today, as to -- as to how I
23 performed the SSNIP in the output
24 market.

1 output market as you define it, you
2 didn't do a SSNIP analysis for cable
3 stations or cable networks?

4 A. I don't recall doing a
5 SSNIP, but I would have to go back and
6 refer to my -- from that perspective, but
7 I would have to go back and refer to my
8 initial report.

9 Q. Okay. And do you -- are you
10 able to say today whether cable stations
11 or cable networks are customers in the
12 relevant output market that you defined?

13 A. I think that with the caveat
14 that we are studying the non-pay-per-view
15 events, which, of course, are not the
16 important or salient or marketable or
17 valuable component of the content that's
18 being created, I think that you could say
19 that the cable networks can serve as a
20 proxy for the preferences of the ultimate
21 consumers, but I think that I conducted
22 my relevant output market analysis from
23 the perspective of the ultimate consumers
24 or customers, namely, the viewers.

1 BY MR. ISAACSON:

2 Q. So at the -- by the end of
3 your reply report, you have not done a
4 SSNIP analysis for your output market for
5 sponsors; is that correct?

6 MR. CRAMER: Objection to
7 form.

8 THE WITNESS: I would have
9 to go back and look at my initial
10 report, but I -- my -- sitting
11 here, I don't -- I don't recall
12 doing that.

13 BY MR. ISAACSON:

14 Q. Okay. And at the end of
15 your reports, for your -- for the
16 relevant output market you have defined,
17 you haven't done a SSNIP analysis for
18 broadcast networks; is that correct?

19 A. I think the same answer.

20 It's possible I had record evidence that
21 spoke to the views of broadcasters, but
22 I -- sitting here, that's not what I
23 recall.

24 Q. Okay. For your relevant

1 Q. Are the consumers the only
2 relative -- relevant customers in the
3 output market you have defined?

4 A. Can I have it back?
5 - - -
6 (The reporter read from the
7 record as requested.)
8 - - -

9 BY MR. ISAACSON:

10 Q. And by "consumers," I mean
11 individuals who attend or watch events,
12 such as myself.

13 A. I am going to have it back.
14 I am sorry.

15 Q. Sure. I don't blame you.
16 - - -
17 (The reporter read from the
18 record as requested.)
19 - - -

20 BY MR. ISAACSON:

21 Q. And by "consumers," I mean
22 individuals who attend events or watch
23 them.

24 A. I don't know what it means

<p style="text-align: right;">Page 555</p> <p>1 to say the only relevant. I think I have 2 answered this now several times, which is 3 that there are other intermediaries that 4 sometimes stand between the consumer, the 5 end consumer, and the producer of the 6 events. And whether or not you want to 7 call them relevant, I think, doesn't 8 really have any bearing on my analysis 9 much.</p> <p>10 Q. Okay. I understand. What I 11 am trying to understand is other than as 12 a proxy for individual consumers, were -- 13 proxy or intermediary for individual 14 consumers, were broadcast networks, cable 15 stations or -- broadcast networks or 16 cable stations relevant to your output 17 market analysis?</p> <p>18 A. Only insofar as they are 19 representing an intermediary or a proxy 20 for the ultimate viewer or consumer.</p> <p>21 Q. All right. And while you 22 considered them -- cable stations and 23 broadcast networks as intermediaries for 24 individual viewers and customers, you did</p>	<p>1 shorthand, the sponsorship tax, 2 but that was designed largely to 3 see if fighters would defect, and 4 so it was more, I think, relevant 5 for the input market. We are 6 talking about output market now.</p> <p>7 BY MR. ISAACSON: 8 Q. Yes, that's true. We were 9 just talking about relevant output 10 market.</p> <p>11 A. I think that if this were a 12 different case and it concerned the 13 exercise of market power vis-à-vis 14 sponsors, say, a price increase of 15 advertisement, say, for the -- for the 16 sponsors, I just -- sitting here thinking 17 about the way that I informed the 18 relevant output market, I can't recall. 19 It's possible that it's in there, but I 20 just can't recall analyses that were done 21 from the perspective of sponsors.</p> <p>22 Q. Okay. Now, I think you 23 mentioned that you considered broadcast 24 of MMA to be a small sliver of the</p>
<p style="text-align: right;">Page 556</p> <p>1 not consider them, other than that, to be 2 customers in your relevant output market; 3 is that correct?</p> <p>4 A. Other than the preferences 5 that they are -- that they are trying to 6 capture of their viewers, I don't know 7 what else there is to capture. But -- so 8 I will leave it at that.</p> <p>9 Q. And sponsors, you don't 10 consider sponsors to be intermediaries 11 for individual viewers or customers; is 12 that correct?</p> <p>13 A. I would consider sponsors 14 differently. I don't consider them to be 15 an intermediary or a proxy for the demand 16 of the -- of the viewers, no.</p> <p>17 Q. And you wouldn't consider 18 sponsors to be customers in the relevant 19 output market that you have defined?</p> <p>20 MR. CRAMER: Asked and 21 answered.</p> <p>22 THE WITNESS: There is 23 analysis, of course, that is 24 coming to mind of what I call</p>	<p>1 valuable television of MMA? 2 A. Oh, yes. 3 Q. Would you explain what you 4 mean by that? 5 A. When you just use the 6 weights, when you compute the 7 pay-per-view revenues versus the 8 non-pay-per-view revenues on TV, 9 pay-per-view is much bigger. 10 Q. All right. 11 MR. ISAACSON: Could we give 12 him his original report or do you 13 have the original report there? 14 MR. WIDNELL: No. 15 BY MR. ISAACSON: 16 Q. This has previously been 17 marked as Exhibit-1. So on page 74 of 18 your opening report, paragraph 108, in 19 the last sentence, last sentence of 20 paragraph 108. 21 A. Yeah, I was just getting my 22 bearings. Hold on. Yes, got it. 23 Q. It says: Fight Matrix is 24 recognized by Zuffa itself as an</p>

<p>1 authoritative source of MMA Fighter 2 rankings.</p> <p>3 And for that, you cite the 4 definition of Javier Vazquez?</p> <p>5 Is there anything else that 6 you would point to to support that?</p> <p>7 MR. CRAMER: He signed the 8 exhibits, too.</p> <p>9 MR. ISAACSON: Yes, he 10 signed the deposition exhibits.</p> <p>11 MR. CRAMER: Let me just 12 lodge an objection. You've had 13 many hours to depose the witness 14 on the opening report, and this 15 report was written a long time 16 ago. You should have asked this 17 question at the opening report.</p> <p>18 MR. ISAACSON: No. We -- we 19 allocated our -- we were allowed 20 to allocate our hours as to how we 21 wanted and whether we wanted to. 22 So we were allowed to do both 23 reports. That was the original 24 deal.</p>	<p>1 A. Sitting here, I am not going 2 to be able to recall others, but it's 3 certainly conceivable that throughout my 4 report I have mentioned others.</p> <p>5 Q. Okay. In your rebuttal 6 report, paragraph 124?</p> <p>7 A. Okay. I have got it.</p> <p>8 Q. Right. So there is a 9 discussion of coefficients that were not 10 statistically significant. And you say 11 that's not at all surprising that some 12 are not individually statistically 13 insignificant, and you explain why.</p> <p>14 A. I think you said -- oh, 15 never mind. Just keep -- keep going. I 16 am sorry.</p> <p>17 Q. All right. And your 18 conclusion is it's not at all surprising 19 that coefficients of some are 20 individually statistically significant, 21 but this does not apply that these 22 control variables are not collectively 23 significant.</p> <p>24 A. You almost said it right,</p>
<p>1 MR. CRAMER: That's not my 2 understanding. I am not going to 3 direct him not to answer.</p> <p>4 MR. ISAACSON: That was 5 actually written down because I 6 was --</p> <p>7 MR. CRAMER: All right. 8 Well, I am not going to direct him 9 not to answer. I am just saying 10 you are asking him to remember 11 something from a long time ago.</p> <p>12 But go ahead.</p> <p>13 THE WITNESS: You are asking 14 me if there are other sources of 15 authority beyond those cited in 16 footnote 300 --</p> <p>17 MR. ISAACSON: Yes.</p> <p>18 THE WITNESS: -- which 19 includes these exhibits, 42, 43 20 and 44, as to whether Zuffa 21 considers the Fight Matrix data to 22 be authoritative?</p> <p>23 BY MR. ISAACSON:</p> <p>24 Q. Yes.</p>	<p>1 but I think you used significant when you 2 meant to say insignificant. It's not 3 surprising that some are --</p> <p>4 Q. You are right. You are 5 right. Let me rephrase.</p> <p>6 A. -- individually -- I will 7 finish -- individually significant when 8 you consider the fact that they are 9 colinear with other -- a myriad of other 10 right-hand side variables in the 11 regression.</p> <p>12 Q. Let me rephrase my question. 13 In your opinion, it's not at all 14 surprising that coefficients on some are 15 individually statistically insignificant, 16 but that does not apply to control 17 variables are not collectively 18 significant?</p> <p>19 A. Well, let me hear the end of 20 that.</p> <p>21 - - -</p> <p>22 (The reporter read from the 23 record as requested.)</p> <p>24 - - -</p>